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6. A method as in claim 5, wherein the step of transmitting signals over a downlink channel comprises transmitting data and power control signals intended for each respective authorized remote CDMA station over the downlink channel.

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7. A method as in claim 5, wherein the step of selectively authorizing comprises:
receiving preamble codes from respective remote CDMA stations; and
in response, transmitting back acknowledgement signals, each acknowledgment signal comprising a code corresponding to a respective one of the preamble codes.

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8. A method as in claim 5, wherein the step of receiving power control signals at the CDMA base station occurs after the reception of a respective preamble from the one authorized remote CDMA station.

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9. A method as in claim 5, wherein the step of receiving power control signals at each respective one of the remote CDMA stations occurs after the reception of an acknowledgement signal from the CDMA base station.

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10. A method as in claim 5, wherein reception of packet data from a specific one authorized remote CDMA station comprises:

receiving over the common packet channel a selected collision detection code from the specific remote CDMA station;

in response to receipt of the selected collision detection code, transmitting back a corresponding collision detection code; and

subsequently receiving data and control signals over the common packet channel from the specific remote CDMA station.

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11. A code-division-multiple-access (CDMA) wireless base station, the base station being assigned a set of possible coded preamble signals for use in CDMA communications the CDMA base station comprising:

a CDMA transmitter;
a CDMA receiver; and
a controller coupled to the CDMA receiver for responding to certain received signals and coupled for control of the CDMA transmitter, such that in operation the CDMA base station:

receives over a Common Packet Channel from a remote station a detectable access burst comprising one of the possible coded preamble signals assigned to the base station selected by the remote station;

sends a coded acknowledgement signal over a control channel, the coded acknowledgement signal corresponding to the received coded preamble signal;

receives power control signals and data, over the Common Packet Channel, from the remote station; and

transmits signals intended for the remote station at power levels based on the received power control signals.

8 12. A CDMA base station as in claim 11, wherein:

9 the reception of data over the Common Packet Channel from the remote station comprises receiving a coded collision detection signal;

upon receipt of the coded collision detection signal, the controller causes the CDMA base station to transmit back over the control channel a corresponding coded collision detection signal; and

the reception of data over the Common Packet Channel from the remote station further comprises receiving the data after transmission of the corresponding coded collision detection signal.

9 13. A CDMA base station as in claim 11, wherein the controller causes the CDMA transmitter to broadcast a frame-timing signal over a common synchronization channel modulated with a common chip-sequence signal.

10 14. A CDMA base station as in claim 13, wherein the CDMA receiver receives the access burst in one of a plurality of access slots defined in relation to the frame-timing signal.

11 15. A CDMA base station as in claim 11, wherein:

the reception of a detectable access burst comprises receiving one or more coded preamble signals that may be transmitted at sequentially increasing discrete power levels;

the controller causes the CDMA transmitter to transmit the acknowledgement signal in response to a first coded preamble signal that is received at an adequate power level;

the reception of power control signals follows the reception of the detectable access burst.

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16. A code-division-multiple-access (CDMA) wireless mobile station, comprising:
a CDMA transmitter;
a CDMA receiver; and
a controller coupled to the CDMA receiver for responding to certain received signals and coupled for controlling the CDMA transmitter, such that in operation the wireless mobile station:
receives a frame-timing signal from a CDMA base station over a broadcast common-synchronization channel having a common chip-sequence signal;
determines frame timing from the received frame-timing signal;
transmits an access burst signal over a Common Packet Channel, in a time slot selected from a plurality of time slots having predefined relationships to the determined frame timing;
receives an acknowledgement signal corresponding to the access burst signal, from the CDMA base station;
receives power control signals and data from the CDMA base station; and
transmits power control signals and packet data to the CDMA base station over the Common Packet Channel at power levels based on the received power control signals,
wherein at least the transmission of the packet data is responsive to receipt of the acknowledgement signal.

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17. A CDMA wireless mobile station as in claim 16, wherein the controller causes the CDMA transmitter to transmit the power control signals to the CDMA base station, prior to the transmission of the packet data.

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18. A CDMA wireless mobile station as in claim 17, wherein the controller causes the CDMA transmitter to transmit power control signals after a coded preamble signal within the access burst signal.

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19. A CDMA wireless mobile station as in claim 16, wherein the controller causes the CDMA transmitter to transmit a selected collision detection code following receipt of the acknowledgement signal and initiates transmission of at least the packet data in response to receipt of a collision detection code from the CDMA base station that corresponds to the selected collision detection code.

20. A method of transferring data for one a plurality of wireless remote station (RS) handsets through a base station (BS) of a wireless telecommunication network, the base station comprising a BS-spread-spectrum transmitter and a BS-spread-spectrum receiver, the method comprising the steps of:

transmitting a frame-timing signal from said BS-spread-spectrum transmitter over a broadcast common-synchronization channel having a common chip-sequence signal;

receiving the broadcast common-synchronization channel comprising a frame timing signal at an RS-spread-spectrum receiver of the one RS handset;

determining frame timing at an RS-spread-spectrum receiver of the one RS handset from the received frame-timing signal;

transmitting one or more segments of an access-burst signal from an RS-spread-spectrum transmitter of the one RS handset, wherein timing of the one or more segments is based on the determined frame timing;

transmitting a spread-spectrum signal comprising power control information and packet data from said RS-spread-spectrum transmitter;

receiving the spread-spectrum signal comprising power control information and packet data at said BS-spread-spectrum receiver;

receiving at least one segment of the access-burst signal at said BS spread-spectrum receiver;

transmitting an acknowledgment from said BS-spread-spectrum transmitter, in response to the receipt of the at least one segment of the access-burst signal;

receiving the acknowledgment at said RS-spread-spectrum receiver;

transmitting a spread-spectrum signal comprising power control information from said BS-spread-spectrum transmitter, after transmitting the acknowledgment;

receiving the spread-spectrum signal comprising power control information at said RS-spread-spectrum receiver;

transmitting from said BS-spread-spectrum transmitter, signals comprising power control information, to said RS-spread-spectrum receiver at power levels determined in part in response to received power control information;

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transmitting data from said RS-spread-spectrum transmitter, to said BS-spread-spectrum receiver at power levels determined in part in response to the received power control information; and

forwarding the received data from said base station to another network element.

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21. The method as set forth in claim 20, wherein at least the transmission of the packet data from said RS-spread-spectrum transmitter is responsive to the reception of the acknowledgement at said RS-spread-spectrum receiver.

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22. The method as set forth in claim 21, wherein transmission of the power control signals from the RS-spread-spectrum transmitter follows the transmission of the

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23. The method as set forth in claim 20, wherein:

the step of transmitting the access-burst signal comprises transmitting a plurality of segments at a plurality of respective power levels; and

the step of receiving at least one segment comprises receiving at least one segment at a detectable power level.

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24. The method as set forth in claim 23, wherein the step of transmitting the access-burst signal comprises transmitting the segments at sequentially increasing power levels.

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25. The method as set forth in claim 20, wherein each segment comprises a selected one of a plurality of preamble codes, and the acknowledgement comprises a coded signal corresponding to the selected preamble code.

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26. The method as set forth in claim 20, further comprising:

transmitting a selected one of a plurality of collision-detection (CD) codes by said RS-spread-spectrum transmitter, in response to receipt of the acknowledgment;

if the BS-spread-spectrum receiver detects the selected CD code from the RS-spread-spectrum transmitter, transmitting a corresponding BS-CD code from said BS-spread-spectrum transmitter; and

if the RS-spread-spectrum receiver detects the corresponding BS-CD code, transmitting at least data to said base station, from said RS-spread-spectrum transmitter.

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~~21~~. A method of providing a packet communication service in a code-division-multiple-access (CDMA) wireless network, comprising:

broadcasting a frame-timing signal from a CDMA base station of the network, over a common synchronization channel modulated with a common chip-sequence signal;

selectively authorizing one of a plurality of remote CDMA stations to use a Common Packet Channel for packet transmissions to the CDMA base station, on a slotted-aloha basis, in a predetermined relationship to the frame-timing signal;

receiving power control signals over the Common Packet Channel from the one authorized remote CDMA station, at the CDMA base station;

transmitting power control signals intended for the one authorized remote CDMA station, from the CDMA base station, at a power level based on the received power control signals; and

^{ad} receiving packet data from the one authorized remote CDMA station over the Common Packet Channel at the CDMA base station.

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~~28~~. A method as in claim ²³~~27~~, further comprising transmitting additional signals intended for the one authorized remote CDMA station at power levels based on the received power control signals.

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~~29~~. A method of providing a packet communication service in a code-division-multiple-access (CDMA) wireless network, comprising:

broadcasting a frame-timing signal from a CDMA base station of the network, over a common synchronization channel modulated with a common chip-sequence signal;

selectively authorizing remote CDMA stations to use a Common Packet Channel for packet transmissions to the CDMA base station, on a slotted-aloha basis, in a predetermined relationship to the frame-timing signal;

receiving power control signals over the Common Packet Channel from respective ones of the authorized remote CDMA stations, at the CDMA base station;

transmitting power control signals intended for the respective remote CDMA stations, from the CDMA base station, at power levels based on power control signals received from the respective remote CDMA stations; and

receiving packet data from the respective remote CDMA stations over the Common Packet Channel at the CDMA base station.